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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,695	03/29/2004	Tiziano Tanaglia	251115US0X	1210
22850	7590	10/12/2007		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
			EXAMINER	
			NUTTER, NATHAN M	
			ART UNIT	PAPER NUMBER
			1796	
			NOTIFICATION DATE	DELIVERY MODE
			10/12/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/810,695	<b>Applicant(s)</b> TANAGLIA, TIZIANO	
	<b>Examiner</b> Nathan M. Nutter	<b>Art Unit</b> 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 2-5 and 18-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 6-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

Applicant contends "(t)he claims have been amended such that every claim requires the presence of elected polymer (i). As such, no claim stands withdrawn as a result of the species election." This is not deemed to be correct. The claims, as amended, are deemed to be properly restrictable as follows:

Newly submitted claims 2-5 and 18-20 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

- I. Claims 1 and 6-17, drawn to a filled resin of a single polymer, classified in class 524, subclasses 394, 406, 413, 425, 444, 447 and 451.
- II. Claims 2-4, drawn to a filled resin of a polymer blend, classified in class 524, subclasses 500 and 515, and class 525, subclasses 191, 222, 232 and 240.
- III. Claim 5, drawn to a filled resin of a polymer blend comprising a vinyl acetate or acrylic acid monomer, classified in class 524, subclasses 500 and 515, and class 525, subclasses 191, 208, 221, 232 and 240.
- IV. Claims 18 and 19, drawn to an insulated electric cable, classified in class 174, subclasses 110R+.
- V. Claim 20, drawn to a polymer, classified in class 526, subclasses 335 and 348.

The inventions are distinct, each from the other because of the following reasons:

Inventions of Group I and of Group II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product, and the species are patentably distinct (MPEP § 806.05(j)). In the instant case, the intermediate product is deemed to be useful as a molding composition and the inventions are deemed patentably distinct because there is nothing on this record to show them to be obvious variants.

Inventions of Groups II and III are directed to an unrelated product and process. Product and process inventions are unrelated if it can be shown that the product cannot be used in, or made by, the process. See MPEP § 802.01 and § 806.06. In the instant case, each of groups II and III is drawn to a polymer blend comprising different polymers.

Inventions of Group I and of group IV are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because other known coating resins are known. The subcombination has separate utility such as a coating or molding composition.

The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are

subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Inventions of group I and of Group V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions require polymers that may be different in scope and, thus, possess different effects.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 2-5 and 18-20 are withdrawn from consideration as being directed to non-elected inventions. See 37 CFR 1.142(b) and MPEP § 821.03.

As such, claims 1 and 6-17 remain pending.

The use of the trademark "(Anox HB)" has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

The provisional rejection of claims 1 and 6-10 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 11/100,522 (Tanaglia US 2005/0239666), is hereby expressly withdrawn.

The rejection of claims 1 and 6-8 under 35 U.S.C. 102(e) as being anticipated by Tanaglia (US 2005/0239666), is hereby expressly withdrawn.

The rejection of claims 1 and 6-17 under 35 U.S.C. 102(e) as being anticipated by Tanaglia et al (US 2005/0113518), is hereby expressly withdrawn.

The rejection of claims 1 and 6-8 under 35 U.S.C. 102(b) as being anticipated by Tanaglia (US 6,211,332), is hereby expressly withdrawn.

The following grounds of rejection are being repeated, or are newly applied herein.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 16 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim recites 2,2,4-trimethyl-1,2-dihydroquinoline polymer without providing support therefor.

Note MPEP 608.01(v) under the section titled "I. Trademarks," reproduced below.

The relationship between a trademark and the product it identifies is sometimes indefinite, uncertain, and arbitrary. The formula or characteristics of the product may change from time to time and yet it may continue to be sold under the same trademark. In patent specifications, every element or ingredient of the product should be set forth in positive, exact, intelligible language, so that there will be no uncertainty as to what is meant. Arbitrary trademarks which are liable to mean different things at the pleasure of manufacturers do not constitute such language. *Ex Parte Kattwinkle*, 12 USPQ 11 (Bd. App. 1931).

The recitation of the trademark "(Anox HB)" is not deemed sufficient to provide support for the recitation to include the polymer recited in claim 16.

Claims 11, 14 and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The recitation of "a positive amount" in each of claims 11, 14 and 15 is not supported by the Specification, as originally filed. The range of "a positive amount" finds no support in the Specification, as originally filed.

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11, 14 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation in each of claims 11, 14 and 15 of "a positive amount" is deemed to render the claims as vague and confusing. The claims do not provide for any reasonable interpretation as to what may be included thereby, as to what the limits of inclusion may be. As such, the proper metes and bounds of the claims cannot be easily ascertained.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).



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Claims 1 and 6-17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No. 11/014,772 (Tanaglia US 2005/0148724) in view of Abu-Isa et al (US 4,559,688) and Stine et al (US 3,990,479), both newly cited.

The claims of the copending application teach the treatment of EP(D)M resins using shear and hydroperoxides, as claimed, to produce a filled resin composite comprising mineral fillers, plasticizer, process coadjuvant additive, antioxidant, lead or zinc oxide, and crosslinking peroxide. The reference does not show the use of the silane coupling agents for the mineral filler or the peroxide vulcanization coadjuvant.

The reference to Abu-Isa et al shows the conventionality of using a peroxide vulcanization coadjuvant of N,N'-m-phenylene dimaleimide for an EP(D)M resin composition comprising mineral fillers, a plasticizer of paraffinic oil (wax), zinc oxide, crosslinking peroxide, etc. essentially the same as the primary reference in composition of constituents. Note column 4 (lines 18-33) wherein the employment of the co-agent is disclosed.

The reference to Stine et al shows the conventionality of using a vinyl silane coupling agent in an EP(D)M resin composition that may comprise mineral fillers, including kaolin, talc, etc. (column 6, lines 39 et seq.) with a vinyl silane coupling agent. This composition also contains plasticizers, including paraffinic oil (wax), lead and/or zinc oxide, antioxidants (column 7, lines 17 et seq.) and phenylene dimaleimide (vulcanization coadjuvant).

As such, each reference shows the production of EP(D)M composites, as recited and claimed. The references to Abu-Isa et al and Stine et al teach the conventionality of using silane coupling agents for the mineral filler and peroxide vulcanization coadjuvants, as conventional.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

Applicant's arguments filed 16 February 2007 have been fully considered but they are not persuasive.

With regard to the provisional rejection of claims 1 and 6-17 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No. 11/014,772 (Tanaglia US 2005/0148724), applicant argues "U.S. 2005/0148724 relates to elastomeric blends based on carbon black, and nowhere discloses or suggests the particular composition as described above in amended Claim 1. As a review of both the specification and published claims will show, the reference requires, in all instances, the presence of a significant amount of carbon black." It is pointed out to applicant that the recitation of "comprising" in claim 1 fails to exclude carbon black, even in major amounts, as applicant contends. The reference clearly recites in claims 12 and 13 the inclusion of mineral filler, including calcium carbonate, kaolin, silica and talc, plasticizer, including mineral oil and paraffinic wax, a

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process coadjuvant of either stearic acid or polyethylene glycol, an antioxidant, zinc or lead oxide, etc..

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

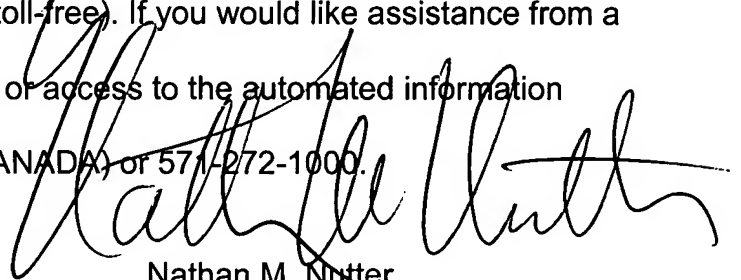
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 571-272-1076. The examiner can normally be reached on 9:30 a.m.-6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Nathan M. Nutter', is written over the text of the paragraph.

Nathan M. Nutter  
Primary Examiner  
Art Unit 1711

nmn

30 September 2007